

CLAIMS

1. Apneumatic-tire-use electronic-device fixing system for fixing an electronic device to be mounted on a pneumatic tire, the pneumatic-tire-use electronic-device fixing system comprising:

an electronic-device housing apparatus, which houses the electronic device, and which includes an engaging convex portion that is convex; and

an electronic-device housing apparatus support, which is provided on an inner surface of the pneumatic tire, and which includes an engaging concave portion that is concave, wherein:

first pullout suppression means which suppresses pullout of the engaging convex portion from the engaging concave portion is provided on at least a part of a surface of the engaging convex portion; and

second pullout suppression means which engages with the first pullout suppression means is provided on at least a part of a surface of the engaging concave portion.

2. The pneumatic-tire-use electronic-device fixing system according to claim 1, wherein:

BEST AVAILABLE COPY

at least a part of the surface of the engaging convex portion includes a first zigzag region formed in a zigzag; and

5

at least a part of the surface of the engaging concave portion includes a second zigzag region formed in a zigzag, the second zigzag region engaging with the first zigzag region.

10

3. The pneumatic-tire-use electronic-device fixing system according to any one of claims 1 and 2, wherein:

15

the engaging convex portion includes a first insertion hole;

the engaging concave portion includes a second insertion hole communicating with the first insertion hole,

20

the pneumatic-tire-use electronic-device fixing system further comprising a lock pin to be inserted into the first and second insertion holes which have been made to communicate with each other.

25

4. The pneumatic-tire-use electronic-device fixing system according to any one of claims 1 to 3, wherein the electronic-device housing apparatus support is a rubber

**BEST AVAILABLE COPY**

body provided inside the pneumatic tire inward of an inner liner of the pneumatic tire.

5. The pneumatic-tire-use electronic-device fixing system according to any one of claims 1 to 4, wherein the electronic-device housing apparatus support is provided on the pneumatic tire in steps of molding and vulcanizing the pneumatic tire.
6. A pneumatic tire comprising an electronic-device housing apparatus support which supports an electronic device housing apparatus having an engaging convex portion that is convex, wherein:
- the electronic-device housing apparatus support is provided on an inner surface of the pneumatic tire, and includes an engaging concave portion that is concave; and
- pullout suppression means is provided on at least a part of a surface of the engaging concave portion, the pullout suppression means engaging with the engaging convex portion and thereby suppressing pullout of the engaging convex portion from the engaging concave portion.
7. The pneumatic tire according to claim 6, wherein at least a part of the surface of the engaging concave portion includes a zigzag region formed in a zigzag.

**BEST AVAILABLE COPY**

8. The pneumatic tire according to any one of claims 6 and 7, wherein the electronic-device housing apparatus support is a rubber body provided inside the pneumatic tire inward of an inner liner of the pneumatic tire.

9. The pneumatic tire according to any one of claims 6 to 8, wherein the electronic-device housing apparatus support is provided on the pneumatic tire in steps of molding and vulcanizing the pneumatic tire.

10. An electronic-device housing apparatus, which is supported by an electronic-device housing apparatus support including an engaging concave portion provided on a pneumatic tire, and which houses an electronic device mounted on the pneumatic tire,

the electronic-device housing apparatus comprising an engaging convex portion that is convex, wherein

pullout suppression means, which engages with the engaging convex portion, and which suppresses pullout of the engaging convex portion from the engaging concave portion, is provided on at least a part of a surface of the engaging convex portion.

11. The electronic device housing apparatus according to

**BEST AVAILABLE COPY**

claim 10, wherein at least a part of the surface of the engaging convex portion includes a first zigzag region formed in a zigzag.

- 5     12.    The electronic device housing apparatus according to any one of claims 10 and 11, wherein:

the engaging convex portion includes a first insertion hole;

10

the engaging concave portion includes a second insertion hole communicating with the first insertion hole; and

15

the electronic-device housing apparatus is fixed by a lock pin inserted into the first and second insertion holes which have been made to communicate with each other.

**BEST AVAILABLE COPY**